RUST GEOTECH INC.

Spectral Gamma-Ray Borehole
Log Data Report

Borehole 41-02-11

Log Event A

Borehole Information

Farm : SX	**Tank :** SX-102	**Site Number :** 299-W23-193
N-Coord : 35,590	**W-Coord :** 75,795	**TOC Elevation :** 663.00
Water Level, ft : 94.90	**Date Drilled :** 10/28/1974	

Casing Record

Type : Steel-welded	**Thickness :** 0.280	**ID, in. :** 6
Top Depth, ft. : 0	**Bottom Depth, ft. :** 100	

Equipment Information

Logging System : 2	**Detector Type :** HPGe	**Detector Efficiency:** 35.0 %
Calibration Date : 03/1995	**Calibration Reference :** GJPO-HAN-1	

Logging Information

Log Run Number : 1	**Log Run Date :** 4/21/1995	**Logging Engineer:** Kim Benham
Start Depth, ft.: 98.0	**Counting Time, sec.:** 100	**L/R :** L **Shield :** N
Finish Depth, ft. : 31.0	**MSA Interval, ft. :** 0.5	**Log Speed, ft/min.:** n/a

Log Run Number : 2	**Log Run Date :** 4/24/1995	**Logging Engineer:** Gary Lekvold
Start Depth, ft.: 31.0	**Counting Time, sec.:** 100	**L/R :** L **Shield :** N
Finish Depth, ft. : 0.0	**MSA Interval, ft. :** 0.5	**Log Speed, ft/min.:** n/a

Borehole 41-02-11

Log Event A

Analysis Information

Analyst : S.E. Kos

Data Processing Reference : Data Analysis Manual Ver. 1 Analysis Date : 8/4/1995

Analysis Notes :

Borehole 41-02-11 was completed with a 6-in.-nominal-diameter carbon steel casing to a depth of 100 ft (TD). The wall thickness of the casing is assumed to be 5/16 in. The casing correction used for data analysis was . 33 in.; consequently, the reported activities may be slightly lower than actual. No water correction was applied to the data below 94.9 ft.

Cs-137 was the only man-made gamma-ray emitting radionuclide identified. It was detected from the surface down to about 56 ft with two zones with higher concentration and larger volumes of contamination; one from 20 to 30 ft and one from 48 to 56 ft, which corresponds to the base of the tank. Some slightly elevated activity was detected at the bottom of the well.

The K-40, U-238 and Th-232 logs show increases in concentration at about 66 ft, which is probably caused by a change in lithology.

Log Plot Notes:

Three log plots are provided. The Cs-137 concentration is plotted alone to provide details of concentration and distribution. The error of the calculated Cs-137 activity is shown by error bars that represent the 95-percent confidence interval. The calculated MDA is represented as open circles on the log plots.

The plot of natural gamma logs shows the naturally occurring K-40, U-238 and Th-232 concentrations. It is provided to allow correlation between boreholes of lithologically related features. The natural gamma logs are also shown with the MDA values and error bars representing the 95-percent confidence intervals.

On the Th-232 plot, the MDA value is shown as zero at some depth locations. This zero value was a result of an anomaly in the commercial spectrum analysis spectrum software which has been corrected by the vendor. Because the MDA calculation at these few points is not significant relative to the intended use of the plot, the data were not reprocessed and corrected. Therefore, these MDA data points on the plot should be ignored.

A combination plot incorporates the Cs-137 and KUT data with total gamma count rate derived from the spectral gamma data and WHC gross gamma data acquired with the Tank Farms gross gamma logging systems. The combination plot allows correlation of Cs-137 occurrence with lithologic features.